

60Hz/1800 r.p.m-P.F.0.8					Prime Power	Standby Power	Rated Current
Genset	Engine	Alternator	Voltage (V)	PH	kW/kVA	kW/kVA	Amps
FC150X-F	R6105BZLDS2	N/A UCI274G	240 (220-240)	1	120/150	132/165	625.0
		N/A LSA44.3L10 UCI274E FPA27-1124	380/220	3	120/150	132/165	227.9
		LSA44.3L10 UCI274E FPA27-1003	208/120	3	120/150	132/165	416.4
		LSA44.3M8 UCI274E FPA27-1003	220/127	3	120/150	132/165	393.7
		LSA44.3M6 UCI 274E FPA27-1003	230/132	3	120/150	132/165	376.5
		LSA44.3M6 UCI274D FPA27-1003	480/277	3	120/150	132/165	180.4

Ratings:

All three Phase generator sets are rated at 0.8 power factor. All single-phase generator sets are rated at 0.8 or 1.0 power factor. POWERGEN reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever.

Prime Power:

Available continuously at variable load in lieu of commercially purchased power for an unlimited number of hours per year in accordance with ISO8528-1, and an overload of 10% permitted for one hour in every twelve hours of operation in accordance with ISO 3046-1.

Standby Power:

Emergency Standby Power in variable load applications in accordance with ISO8528-1 in the event of a utility power failure. No overload available for this service as relevant alternators are peak continuous rated at 27°C.

Overall Dimensions (mm) & Weight (kg)

LENGTH 3400

WIDTH 1100



HEIGHT 1500



Weight (kg) : 2300

Standard and Optional Accessories

System	Standard ●	Optional ○
Air Intake System	<ul style="list-style-type: none"> ● Standard air filter ● Air filter overload alarm 	<ul style="list-style-type: none"> ○ Air prefilter ○ Heavy air filter
Cooling System	<ul style="list-style-type: none"> ● 50°C radiator ● Low water level alarm ① ● Fan and belt guard 	<ul style="list-style-type: none"> ○ Antifreeze ○ Water jacket heater
Exhaust System	<ul style="list-style-type: none"> ● Discharge valve ● Stainless steel bellow ● Residential silencer ● Complete exhaust pipe ● Rain cap 	<ul style="list-style-type: none"> ○ Stainless steel silencer ○ Stainless steel exhaust pipe
Fuel System	<ul style="list-style-type: none"> ● 8 Hours integrated base fuel tank ● Standard fuel filter ● Fuel level gauge ● Fuel filling cap 	<ul style="list-style-type: none"> ○ 6 Hours double wall base fuel tank ○ Fuel-water separator ○ Oil level sensor ②③ ○ Automatic fuel top up system ②
Lubrication System	<ul style="list-style-type: none"> ● Fuel hose ● Standard oil filter ● Manual oil pump and drain 	<ul style="list-style-type: none"> ○ Oil heater ○ Lube oil level indicator
Alternator and Electric Switch	<ul style="list-style-type: none"> ● Shunt or self excited ● Class H insulation ● H class temperature rise ● DELIXI MCCB ● Terminal connection lugs (L1, L2, L3, LN) 	<ul style="list-style-type: none"> ○ Oil temperature indicator ② ○ PMG or AREP (Leroy-Somer only) ○ Alternator space heaters ○ PT100 winding temperature sensors ○ Weaver AVR ○ Weaver prolapse transformer ○ F class temperature rise ○ 4 Pole circuit breaker with leakage protection ○ Circuit breaker - 4 pole ○ ABB MCCB ○ MCCB auxiliary contact and shunt tripping
Control System	<ul style="list-style-type: none"> ● Comap Nano Plus for 4 cylinders engine ● Comap IntelliLite AMF20 for 6 cylinders or ECU engine 	<ul style="list-style-type: none"> ○ Panel lighting
Silent / Base	<ul style="list-style-type: none"> ● 67-72 db(A) @ 3 meters ● 4mm -6mm Steel base ● Transportation support leg ● Single hook ● Power coating enclosure ● Anti-vibration mounting between engine /alternator and baseframe ● Emergency stop mounted outside the canopy 	<ul style="list-style-type: none"> ○ Forklift holes ○ Enclosure color: ○ Trailer for off road or on road
Start / Charge	<ul style="list-style-type: none"> ● Standard color: Ral 3020 ● Battery with bracket and cables ● Engine battery charger ● 3A Mains charger 	<ul style="list-style-type: none"> ○ Low temperature starting batteries ○ Battery switch ○ High current charger (10A, 20A)

Remark: ① Not available for Perkins 400 series engines

- ② When you need the automatic oil top up system, you have to use the electrical oil level sensor.
- ③ You can choose either electrical oil level sensor or oil temperature sensor.

Engine

Engine specifications

Manufacture	Kofo
Engine model	R6105BZLDS2
Engine type	4 cycle, in-
line Engine speed	1800
r.p.m Prime power	
140 kW Standby power	
154 kW Governor type	
Mechanical Steady speed adjusting ratio at rated condition	
≤5	
Aspiration:	Turbocharged, air-to-air charge cooling
Displacement	7.01 L
Bore * Stroke	105 x135 mm
NO. of cylinders	6
Compression ratio	16.0:1
Engine idle speed	≤650 rpm
Fring order	1-5-3-6-2-4
Flywheel ring gear teeth number	130

Noise level @7m 74 dBA

Exhaust system

Exhaust gas temperature ≤600°C

Exhaust outlet size 66 mm

Air intake system

Maximum air intake restriction
- Standard filter ≤2.5 kPa

- Air filter type Dry

Fuel System

Type injection system	Indirect
Injection Fuel consumption at 100% standby power	41.8
Litres/hou Fuel consumption at 100% prime power	38.0
Litres/hou Fuel consumption at 75% prime power	30.4
Litres/hou Fuel consumption at 50% prime power	22.8
Litres/hou Fuel consumption at 25% prime power	11.4
Litres/hour Fuel tank capacity	

8-12 hours Lubrication System

Oil sump capacity	18 Litres
Oil pressure	0.3-0.5 Mp
Oil pressure at idle speed	≥0.1 Mp
Lubricating method	Pressure lubrication
Oil consumption rate	1.63 g/kW.h
Max continuous oil temperature	105°C

Cooling system

Total system capacity	23 Litre
Thermostat operation range	76-85 °C
Maximum top tank temperature	96°C

Electric System

Starting method	Electric motor star
Electrical system voltage	24V
Battery	Maintenance-free
Connecting cables	Available

Alternator

60Hz/1800R.P.M

General data

H Power factor	Cos φ = 0.8
Single Excitation	Shunt / Brushless
1000 m	

Insulation class	
Bearing	
Altitude	≤

Ratings
Prime Power Standby Power

Brand	Alternator	Number of wires	AVR Model	PH	Voltage (V)	kW/kVA	kW/kVA
Leroy-Somer Stamford Tide	N/A UCI274G N/A	4	AS440	1	240 (220-240)	N/A 120/150 N/A	N/A N/A N/A
Leroy-Somer Stamford Tide	LSA44.3L10 UCI274E FPA27-1124	12	R250 AS440 SX460	3	380/220	118/148 128/160 122/152.5	130/163 140/175 134/167.5
Leroy-Somer Stamford Tide	LSA44.3L10 UCI274E FPA27-1003	12	R250 AS440 SX460	3	208/120	130/163 128/160 120/150	143/179 140/175 132/165
Leroy-Somer Stamford Tide	LSA44.3M8 UCI274E FPA27-1003	12	R250 AS440 SX460	3	220/127	124/155 134/167.5 120/150	136/170 145/181.3 132/165
Leroy-Somer Stamford Tide	LSA44.3M6 UCI 274E FPA27-1003	12	R250 AS440 SX460	3	230/132	120/150 134/167.5 120/150	132/165 145/181.3 132/165
Leroy-Somer Stamford Tide	LSA44.3M6 UCI274D FPA27-1003	12	R250 AS440 SX460	3	480/277	125/156 117/146.3 120/150	138/172 127/158.8 132/165

Control System



Comap Nano Plus



Comap IntelliLite AMF20



Comap IntelliLite AMF25

Viewable parameters	Phase voltage	3	3	3
	Wire voltage	3	3	3
	Current	Instrument	3	3
	Frequency	●	●	●
	Active power	×	●	●
	Reactive power	×	●	●
	Apparent power	×	●	●
	Power factor	×	●	●
Generator protection	Electric energy metering	×	×	●
	Abnormal voltage	●	●	●
	Over-current warning	×	●	● Over
	current protection	×	●	● Over
	Frequency protection	●	●	● Short
Engine figure	circuit protection	MCCB	MCCB+○	MCCB+○
	Oil pressure	●	●	●
	Water temperature	●	●	●
	Fuel level	○	○	○
	Speed	●	●	●
	Battery voltage	●	●	●
Engine protection	Elapsed time	●	●	●
	Low oil pressure warning	●	●	●
	Low oil pressure protection	●	●	●
	High temperature warning	●	●	●
	High temperature protection	●	●	●
	Overspeed warning	●	●	●
Function	Overspeed protection	●	●	●
	Charge fault	●	●	●
	Remote start-stop	●	●	●
	AMF	●	●	●
	Programmable input	3	7	7
	Programmable output	6	7	7
	Port extension	USB	○	○
	Remote monitoring	×	○	○
	Communication port	×	○	○
	CAN	●	○	●
	Start/Stop time control	×	×	●
	Maintenance tips	×	×	●
Fault record	×	×	●	
Multi-language function	×	●	●	

Remark: ● Standard ○ Optional × NA

(Safety Installation: Detect - Control – Switch System)

POWERGEN offers not only a changeover switch but also an integrated mains detection and switch system for your 24 Hour Power Protection. The system enables automatic start-up and operation of the generating set in the event of a mains power failure, overvoltage or loss of phase; and also mains automatic re-transfer once it come back. The system has a wide application such as hospital, bank, telecom, air port, broadcasting station and hotels.

System Advantages

- Automatically transfer and re-transfer load from main power to gen-power without operator intervention operation. (Both automatic and manual)
- ATS Controller (AMF function), seamless integration with Intelligent 5.0
- Available from 32 – 3200A, better protection for 4 pole switch.
- Available in standard, bypass isolation and service-entrance configurations.
- Configurable in open, closed and programmed transition operating modes.
- Designed to interface seamlessly with POWERGEN generators and switchgear.
- Drip Proof IP23 Enclosure.
- Easy Installation: Wall-mounted & Floor standing
- Comes fully loaded with the technology to do the job.



Rated Current	Breaker Type			
	A	Chinese	ABB	Socomec
32	x		B	x
63	A		B	B
80	x		x	B
100	A		B	B
125	x		B	B
160	B		B	B
200	x		B	x
250	C		B	B
300	x		x	x
315	x		C	x
400	C		C	C
630	C		D	D
800	D		D	D
1000	D		D	D
1250	D		D	D
1600	D		D	E
2000	E		E	E
2500	E		E	E
3200	E		x	E

Dimensions : mm

A : 400x200x500

B : 500x300x650

C : 600x400x1200

D : 800x600x1400

E : 1000x800x1600